The 49th Navy & Marine Corps

Public Health Conference

# Effective Use of a Health Risk Assessment (HRA)

Addressing risk with clients

# Disclosure Statement

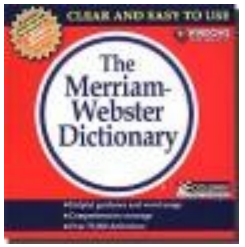
- The presenter has no financial interests with any products or service providers associated with this educational activity.
- The views expressed in this presentation are those of the author and do not necessarily reflect the official policy or position of the Navy and Marine Corps Public Health Center, Navy Bureau of Medicine and Surgery, Department of the Navy, Department of Defense, or the U.S. Government.

# Learning Objectives

Following the presentation, you will be able to:

1. define what an HRA is
2. state four appropriate uses of HRAs
3. distinguish between different types of HRAs
4. plan an intervention and evaluation strategy

# Objective #1: Definition




The assessment of the severity or likelihood of an adverse health outcome due to an exposure to environmental, biological, or social conditions

# Objective #2: HRA Uses

- Provide a baseline to track health improvements
- Identify behavioral and environmental health risks
- Reduce healthcare costs
- Foster a healthy quality of life culture

# Provide a Baseline

For example, what % of our population :

- Smokes, are heavy alcohol consumers, or are overweight/obese
- Are diagnosed with diabetes, hypertension, or mental health problems
- Consume poor nutrition (high fat/cal, low F&V)
- Texting while driving
- Live in houses with lead-based paint
- Ride motorcycles and ATVs

# Identify Individual Behavioral & Environmental Risk

For example, individual

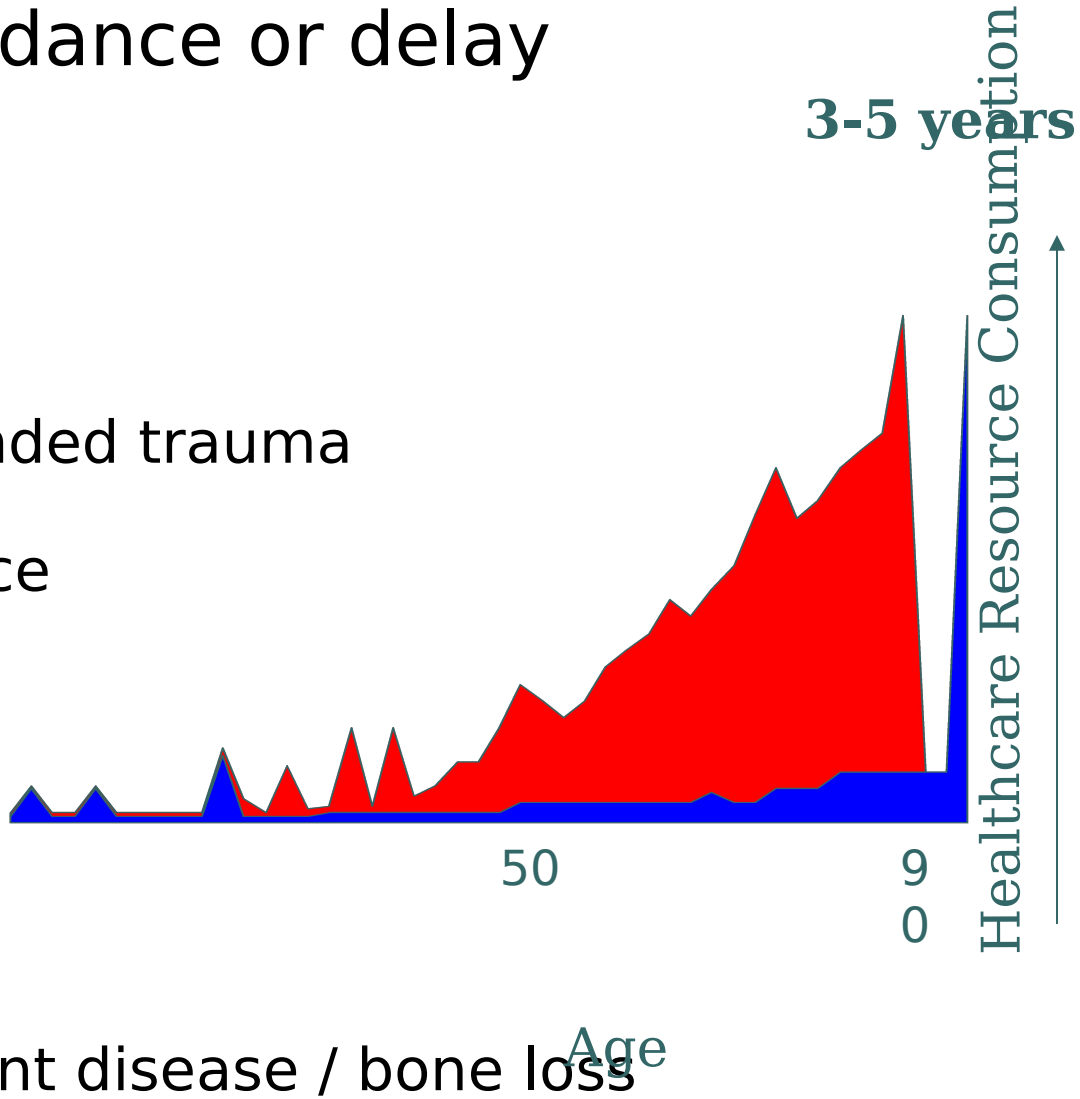
- Has a BMI $\geq$30
- Frequently experiences excessive worksite stress
- Does not wear a seat belt while driving
- Does not use recommended PPE (hearing, respiratory, vision, helmets, boots)
- Engages in unprotected sex with multiple, short-term partners

# Reduce Healthcare Costs

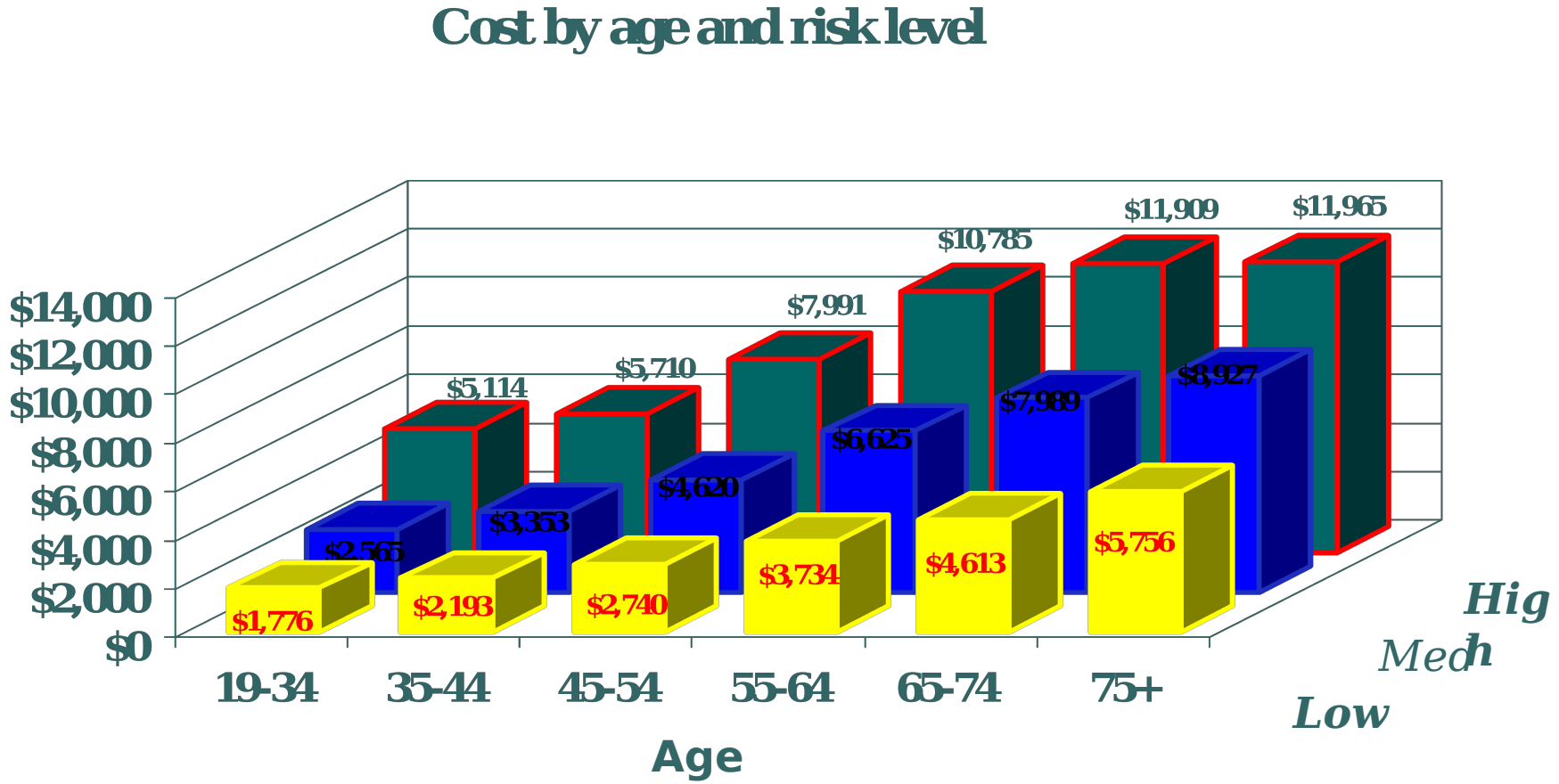
- Disease avoidance or delay
- Move high-risk individuals into a lower risk category
- Engage and empower the healthcare consumer as a manager of their personal health

# Disease avoidance or delay

- Avoid
  - DUI
  - Worksite unintended trauma (accidents)
  - Domestic violence
  - Obesity
  - Certain cancers
- Delay
  - Heart disease
  - Stroke
  - Diabetes
  - Degenerative joint disease / bone loss



# Annual Medical Costs



# Engage and empower individuals

Patient-centered care and health care costs.

- Don’t be afraid to address underlying determinants of health
- Tailor approaches to each individual’s unique environment and circumstances
- Use shared decision making
- Transfer day-to-day responsibility for personal healthcare management to the patient
- Emphasize ongoing communication & education

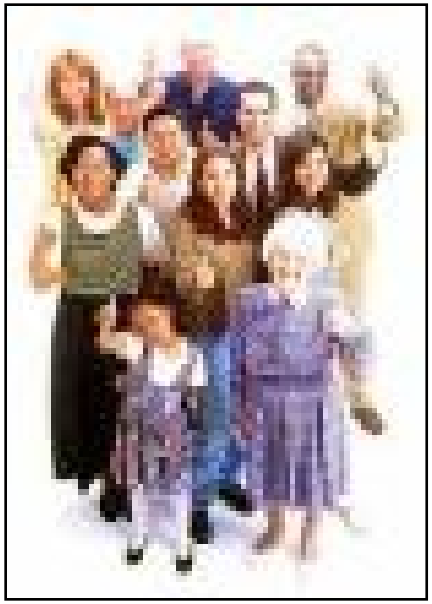
# Foster a Healthy Quality of Life Culture

- Normalize healthy behavior
  - Skill-building
  - Change attitudes
  - Social marketing
  - Incentives

- Promote healthy environments
  - Healthy eating options
  - Designed physical activity in the environment
  - Integrate a community physical activity program
  - Offer Employee Assistance programs for alcohol, drug, and mental health assistance

# Objective #3: Types of HRAs

- Lifestyle assessment
- Disease/Condition Specific
- Age-based
- Gender-based
- Environmental (chemicals, biologicals, insects)



# Lifestyle Assessments

Examples:

- Eating behavior
- Stress management
- Fitness assessment
- Work style

# Disease/Condition Specific

Examples:

- Pain
- Menopause
- Depression
- Post-traumatic stress
- Insomnia
- Skin cancer
- Heart disease
- Diabetes
- Osteoporosis

NATIONAL CHOLESTEROL EDUCATION PROGRAM
Third Report of the Expert Panel on
Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III)

## Risk Assessment Tool for Estimating 10-year Risk of Developing Hard CHD (Myocardial Infarction and Coronary Death)

The risk assessment tool below uses recent data from the Framingham Heart Study to estimate 10-year risk for "hard" coronary heart disease outcomes (myocardial infarction and coronary death). This tool is designed to estimate risk in adults aged 20 and older who do not have heart disease or diabetes. Use the calculator below to estimate 10-year risk.

| | |
|---|---|
| Age: | ____ years |
| Gender: | ○ Female ○ Male |
| Total Cholesterol: | ____ mg/dL |
| HDL Cholesterol: | ____ mg/dL |
| Smoker: | ○ No ○ Yes |
| Systolic Blood Pressure: | ____ mm/Hg |
| Currently on any medication to treat high blood pressure. | ○ No ○ Yes |

Calculate 10-Year Risk

TOP **Total cholesterol** - Total cholesterol values should be the average of at least two measurements obtained from lipoprotein analysis.

TOP **HDL cholesterol** - HDL cholesterol values should be the average of at least two measurements obtained from lipoprotein analysis.

TOP **Smoker** - The designation "smoker" means any cigarette smoking in the past month

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# Clinical Risk Assessments

WebMD healthcheck

In educational collaboration with American Cancer Society

This content is from an educational collaboration between WebMD Editorial and American Cancer Society.

## Concerned About Cancer Risks?

Take the WebMD Cancer Risk Health Check, done in educational collaboration with the American Cancer Society, and learn not only your personal risk for five of the most common cancers - breast, colon, lung, melanoma, and prostate - but also what you can do to prevent them.

GET STARTED

In just a few minutes, you will get:

- A personalized report to share with a doctor
- Content tailored to your personal risks
- Tips from WebMD experts to help you prevent cancer

THIS TOOL DOES NOT PROVIDE MEDICAL ADVICE. It is intended for informational purposes only. It is not a substitute for professional medical advice, diagnosis or treatment. Never ignore professional medical advice in seeking treatment because of something you have read on the WebMD Site. If you think you may have a medical emergency, immediately call your doctor or dial 911.

Reviewed by Brunilda Nazario, MD on June 16, 2009

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# Alcohol Use Disorders Identification Test (AUDIT)

**The AUDIT relies heavily on the concept of a standard drink.**

**1 standard drink = 10 grams of pure alcohol.**

**Examples:**

**1 middy of normal beer**

**2 middies of light beer**

**1 schooner normal beer = 1 1/2 standard drinks**

**2 cans normal beer = 3 standard drinks**

**1 glass of wine**

**1 nip of spirits**

**1 small glass port or sherry**

**How often do you have a drink containing alcohol?**

**How many standard drinks do you have on a typical day when you are drinking?**

**How often do you have 6 or more standard drinks on one occasion?**

**How often during the last year have you found that you were not able to stop drinking once you had started?**

**How often during the last year have you failed to do what was normally expected from you because of your drinking?**

**How often during the last year have you needed an alcoholic drink in the morning to get yourself going after a heavy drinking session?.....etc.**

# Depression Screening

The Reawakening Center

Reawakening Home | Start Here | Learn About Yourself | Online Coaching | Weekly Wake-Up Call | The Library | Finding Information

## Learn About Yourself

### Introduction

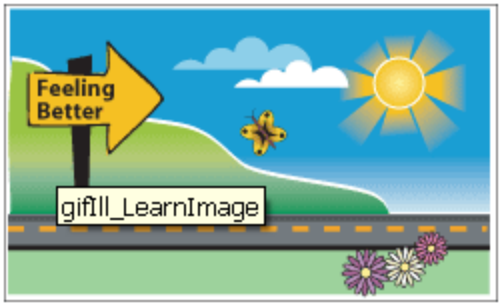
Depression doesn't show up on blood tests or X-rays. It's not easy to see, like a cut or a bruise.

And it may not be easy for you to recognize, even if you feel bad. After all, everyone feels down sometimes. But if you are feeling down for a long time, you could have depression. This short, easy test can give you an idea whether this might be so.

If you think you might be depressed, this is a good place to start on the road to feeling better.

The nine questions take only a few minutes.

Take the Self-Test

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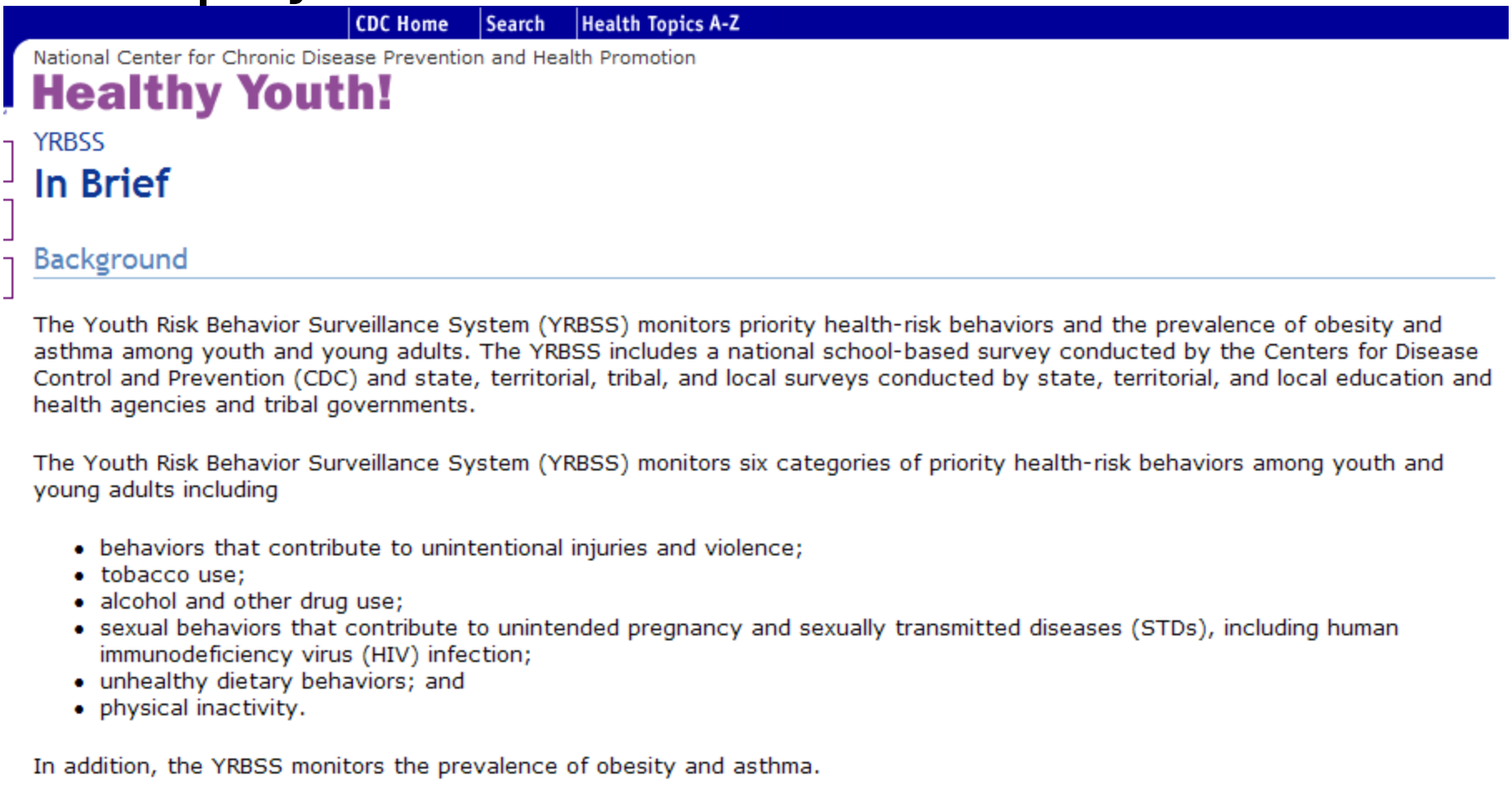
# Age-based Assessment

- Adolescent
- Young adult
- Older adult
- Senior health

# Youth Risk Behavior Surveillance System



CDC Home | Search | Health Topics A-Z

National Center for Chronic Disease Prevention and Health Promotion

**Healthy Youth!**

YRBSS

## In Brief

### Background

The Youth Risk Behavior Surveillance System (YRBSS) monitors priority health-risk behaviors and the prevalence of obesity and asthma among youth and young adults. The YRBSS includes a national school-based survey conducted by the Centers for Disease Control and Prevention (CDC) and state, territorial, tribal, and local surveys conducted by state, territorial, and local education and health agencies and tribal governments.

The Youth Risk Behavior Surveillance System (YRBSS) monitors six categories of priority health-risk behaviors among youth and young adults including

- behaviors that contribute to unintentional injuries and violence;
- tobacco use;
- alcohol and other drug use;
- sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases (STDs), including human immunodeficiency virus (HIV) infection;
- unhealthy dietary behaviors; and
- physical inactivity.

In addition, the YRBSS monitors the prevalence of obesity and asthma.

In 2007, the YRBSS included a national school-based survey conducted by CDC, 44 state surveys, five territory surveys, and 22 local surveys conducted among students in grades 9–12 during January 2007—February 2008.

# Senior Health

Goals for seniors:

- Reduce your risk for diabetes, heart disease, stroke, and cancer
- Avoid falls, automobile accidents, and other injuries
- Live on your own longer
- Maintain rewarding social activities
- Prevent depression

# Gender-based Assessment

- Cancers
- Bone density loss
- Depression
- Sexually transmitted disease

# Environmental Risk Assessment

Examples:

- Safety
- Lead contamination
- Sports safety
- Hurricane preparedness
- Depleted uranium exposure
- Asthma triggers

# Objective #4: Plan an Intervention & Evaluation Strategy

Having identified key health risks in the population:

- Implement interventions based in part on HRA results
- Establish timelines
- Collect data
- Analyze data
- Report

# Do’s and Don'ts

- Do use them to make your work more efficient and effective
- Do select the right tool for the right job
- Do realize the advantages and limitations of self-reported data
- Don’t assume an HRA = clinical evaluation
- Don’t neglect ethical considerations

# Summary

HRAs can be useful and cost-effective tools for improving health at the primary, secondary, and tertiary stages of health if utilized appropriately. Data show  that HRAs save healthcare dollars. If used inappropriately, they can be not only a waste of resources, but also lead to undesirable consequences.

**Question**